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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,645	05/15/2001	Barrie Jeremiah Mullins	ERLGP008US	8737
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OPPEDAHL AND LARSON LLP			CHANG, ERIC	
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DILLON, CO 80435-5068			PAPER NUMBER	

2116

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,645

Applicant(s)

MULLINS ET AL.

Examiner

Eric Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. Claims 7-13 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,553,500 to Sterzik et al., in view of U.S. Patent 5,475,295 to Hong, and in further view of Applicant's Admitted Prior Art.

4. As to claim 7, Sterzik discloses a system comprising a power supply unit controller [2] comprising:

[a] means for reading at least one signal indicative of an output supply level being provided by said power supply unit [col. 3, lines 36-42];

[b] memory for storing information about the power supply unit [col. 2, lines 58-64]; and

[c] communicating means for returning a state of said associated power supply unit to said requesting device [col. 2, lines 61-67], said state including a combination of:

[d] a summary of the current status of the power supply unit [col. 3, lines 36-42],

[e] at least one value [col. 3, lines 22-24],

[f] at least one scaling value [col. 1, lines 30-55, and col. 2, lines 11-14], and

[g] power supply unit identification information [col. 3, lines 24-27].

Sterzik teaches the limitations of the claim, including that the information is supplied to a device powered by said power supply unit controller [col. 2, lines 61-67], but does not teach that the information is provided in response to a request from said device.

Hong teaches that a power supply unit provides status information about itself to a device that it powers [col. 1, lines 32-36]. Thus, Hong teaches a means for providing information about a power supply unit, similar to that of Sterzik. Hong further teaches communicating means, responsive to a request from one of the device, for returning a state of said power supply unit to said requesting device [col. 1, lines 44-55].

At the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the status checking means as taught by Hong. One of ordinary skill in the art would have been motivated to do so that powered device could retrieve status about the power supply unit.

It would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references because they are both directed to the problem of providing information about a power supply unit to a powered device. Moreover, the status checking means taught by Hong would improve the utility of Sterzik because it specifies the means by which status information about the power supply unit is provided to a powered device, that is, in response to a request for status from said device.

In addition, at the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the power supply unit controllers as taught by

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Sterzik and Hong in a system comprising at least two power supply unit controllers for a rack enclosure in which a plurality of devices communicate via a backplane. As disclosed in the Background of the Invention section of the Specification, Applicant admits that it is well known in the art that rack enclosures comprise one or more power supply units for powering a plurality of devices via a backplane [paragraph 2]. One of ordinary skill in the art would have been motivated to do so that the power supply units in a rack enclosure could report their statuses upon request.

5. As to claim 8, Hong discloses a power controller [10] powered by a power supply [11]. Furthermore, Applicant's Admitted Prior Art teaches that devices powered by a power supply in a rack enclosure are powered via the backplane [paragraph 2].

6. As to claim 9, Sterzik discloses that the memory in the power supply stores scaling data that relates to a power capacity of the power supply unit [col. 1, lines 30-55, and col. 2, lines 11-14]. Sterzik teaches that the power supply stores data about the power range that it provides, in order to be configured properly. Thus, Sterzik teaches storing data about the minimum and maximum power ranges that are scaled according to the demand on the power supply [col. 4, lines 9-19].

7. As to claim 10, Hong discloses that device is a higher level processor arranged to monitor the power supply status [col. 1, lines 44-55; remote controller]. It would have been obvious to

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one of ordinary skill in the art that such a status would comprise environmental conditions that would affect the operation of the power supply, substantially as claimed.

8. As to claim 11, Sterzik discloses that the part number and any other information can be retrieved from a power supply unit and communicated to a remote system in order to facilitate identification of a power supply, for example to simplify customer service [col. 2, lines 60-67; col. 3, lines 25-27]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed for accessing information about a power supply unit.

9. As to claim 12, Hong discloses that controller is responsive to a device request to condition the amount of information returned by the power supply unit controller in response to the request [FIG. 1A; col. 1, lines 44-55; col. 2, lines 10-26].

10. As to claim 13, Sterzik discloses a system comprising a power supply unit controller [2] comprising:

[a] means for reading at least one signal indicative of an output supply level being provided by said power supply unit [col. 3, lines 36-42];

[b] memory for storing information about the power supply unit [col. 2, lines 58-64]; and

[c] communicating means for a returning a state of said associated power supply unit to said requesting device [col. 2, lines 61-67], said state including a combination of:

[d] a summary of the current status of the power supply unit [col. 3, lines 36-42],

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[e] at least one value [col. 3, lines 22-24],

[f] at least one scaling value [col. 1, lines 30-55, and col. 2, lines 11-14], and

[g] power supply unit identification information [col. 3, lines 24-27].

Sterzik teaches the limitations of the claim, including that the information is supplied to a device powered by said power supply unit controller [col. 2, lines 61-67], but does not teach that the information is provided in response to a request from said device.

Hong teaches that a power supply unit provides status information about itself to a device that it powers [col. 1, lines 32-36]. Thus, Hong teaches a means for providing information about a power supply unit, similar to that of Sterzik. Hong further teaches communicating means, responsive to a request from one of the device, for returning a state of said power supply unit to said requesting device [col. 1, lines 44-55].

At the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the status checking means as taught by Hong. One of ordinary skill in the art would have been motivated to do so that powered device could retrieve status about the power supply unit.

It would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references because they are both directed to the problem of providing information about a power supply unit to a powered device. Moreover, the status checking means taught by Hong would improve the utility of Sterzik because it specifies the means by which status information about the power supply unit is provided to a powered device, that is, in response to a request for status from said device.

In addition, at the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the power supply unit controllers as taught by Sterzik and Hong in a system comprising at least two power supply unit controllers for a rack enclosure in which a plurality of devices communicate via a backplane. As disclosed in the Background of the Invention section of the Specification, Applicant admits that it is well known in the art that rack enclosures comprise one or more power supply units for powering a plurality of devices via a backplane [paragraph 2]. One of ordinary skill in the art would have been motivated to do so that the power supply units in a rack enclosure could report their statuses upon request. Furthermore, Hong discloses a power controller [10] powered by a power supply [11], and Applicant's Admitted Prior Art teaches that devices powered by a power supply in a rack enclosure are powered via the backplane [paragraph 2].

Response to Arguments

11. Applicant's arguments filed June 29, 2005 have been fully considered but they are not persuasive.

12. In the remarks, applicants argued in substance that Hong and Sterzik do not teach or suggest "two power supply unit controllers". But as disclosed in the Background of the Invention section of the Specification, Applicant admits that it is well known in the art that rack enclosures comprise one or more power supply units for powering a plurality of devices via a backplane [paragraph 2]. Although the teachings of Hong and Sterzik are directed towards an individual power supply and associated controller, Applicant admits that it is well known in the

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art that a plurality of individual power supply units may be used in a system. Thus, it would have been obvious to one of ordinary skill in the art that two power supply units as taught by Hong and Sterzik could likewise be used in a rack enclosure, substantially as claimed.

13. In the remarks, applicants argued in substance that Hong and Sterzik do not teach or suggest a “memory for storing”. But Sterzik clearly teaches a power supply unit comprising memory for storing data [col. 2, lines 15-24].

14. In the remarks, applicants argued in substance that Hong and Sterzik do not teach or suggest a “scaling value”. But Sterzik teaches at least one scaling value [col. 1, lines 30-55, and col. 2, lines 11-14]. Specifically, Sterzik teaches that a power supply must supply a certain amount of power given the demand of the system, and that the power supply can reconfigure itself to meet the demands while preventing an overloading or an underloading condition. Furthermore, Sterzik teaches that the power supply stores values defining a load on the power supply [col. 2, lines 28-34], and that this information is used to reconfigure the power supply based on the power supply requirements [col. 2, lines 15-24]. Because Sterzik teaches these values control the amount of power based on a power supply requirement level, that is, the amount of power supplied is scaled to the power supply demand, Sterzik teaches a plurality of scaling values, substantially as claimed.

15. In the remarks, applicants argued in substance that Hong and Sterzik do not teach or suggest a “serial number”. But Sterzik teaches that information about the power supply unit that

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is of interest regarding the power supply unit can also be stored and read [col. 3, lines 24-27].

By way of example, Sterzik teaches that such information comprises identification information, such as a part number, may be stored, in addition to other system configuration information data [col. 3, lines 22-30]. Although Sterzik does not specifically teach a “serial number”, a serial number is identification information that can be used in system configuration, and as such, it would have been obvious to one of ordinary skill in the art that Sterzik teaches the serial number of a power supply can be stored in the power supply, substantially as claimed.

16. In the remarks, applicants argued in substance that Hong and Sterzik do not teach or suggest “communicating means, responsive to a request from one of the devices”. But Sterzik teaches communicating means for returning information relating to a power capacity of the power supply unit [col. 2, lines 61-67] and configuration identification information [col. 3, lines 24-27]. Sterzik teaches the power capacity information comprises values for scaling the output of the power supply unit based on the power supply demand [col. 2, lines 15-34], and that the configuration information comprises identification information [col. 3, lines 22-30].

Furthermore, Sterzik teaches that the information may be retrieved in response to a request in the form of a power supply checking signal from a requesting device [col. 3, lines 26-27]. In addition, Hong teaches that a power supply unit provides status information about itself to a device that it powers [col. 1, lines 32-36]. Thus, Hong teaches a means for providing information about a power supply unit, similar to that of Sterzik. Hong further teaches communicating means, responsive to a request from one of the device, for returning a state of said power supply unit to said requesting device [col. 1, lines 44-55].

17. In the remarks, applicants argued in substance that Hong and Sterzik do not teach or suggest that a “higher level” processor. But Hong teaches a remote controller for transmitting power supply checking requests and receiving power supply status information in response [col. 1, lines 37-55]. Because the remote controller controls the electronic device from which it requests information, it is “higher level” controller. Furthermore, as disclosed in the Background of the Invention section of the Specification, Applicant admits that it is well known in the art that rack enclosures comprise one or more power supply units for powering a plurality of devices via a backplane [paragraph 2]. Thus, it would have been obvious that the power supply units and their “higher level” processor could also be disposed in a rack enclosure as is well known to one of ordinary skill in the art.

18. In the remarks, applicants argued in substance that Hong and Sterzik do not teach or suggest that each controller draws power from the backplane. But as disclosed in the Background of the Invention section of the Specification, Applicant admits that it is well known in the art that rack enclosures comprise one or more power supply units for powering a plurality of devices via a backplane [paragraph 2]. Thus, it would have been obvious to one of ordinary skill in the art that the controllers within a rack enclosure, as is well known to one of ordinary skill in the art, would likewise also draw power from the backplane, substantially as claimed.

Conclusion

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19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Chang whose telephone number is (571) 272-3671. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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September 15, 2005

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JOHN F. COTTINGHAM
PRIMARY EXAMINER